

Introduction

Of the approximate 1.4 billion people living in poverty around the world, two-thirds live in Asia. For most of Asia's poor, food costs account for more than half of total expenditures. The AquaFish Innovation Lab (formerly CRSP) is currently supporting efforts to improve and develop aquaculture for sustained food security and nutrition in Asia, partnering with 13 US and international institutions. Partnerships are designed to focus research and education in-country, creating opportunities to build capacity and transfer updated technology where it is needed most. Current research and capacity building in Asia aims to address poverty and hunger through advancing the sustainability of aquaculture practices in Cambodia, Bangladesh, Nepal, and Vietnam. Previous work has been carried out in China, Thailand, Indonesia, and the Philippines.

Research & Technology Development

AquaFish develops technology in Asia through supporting innovative research focused on:

- Climate Change Adaptation: Indigenous Species Development
- Production System Design And Best Management Alternatives
- Quality Seedstock Development
- Sustainable Feed Technology And Nutrient Input Systems
- Marketing, Economic, Risk Assessment, And Trade
- Human Nutrition And Human Health Impacts Of Aquaculture
- Watershed and Integrated Coastal Zone Management

Capacity Building

AquaFish works with partners to transfer technology and build capacity in sustainable aquaculture through:

- Leading training events and workshops
- Supporting students in obtaining advanced degrees
- Supporting attendance at national and international conferences,
- Building professional networks
- Strengthening institutional capacity through curriculum and professional development



RESEARCH & TECHNOLOGY HIGHLIGHTS

RESEARCH & TECHNOLOGY DEVELOPMENT

Current core projects propose to develop a broad array of new and improved aquaculture technologies in the region.

NEPAL

- Developing demonstration systems for tilapia and sahar polyculture production
- Transferring breeding technology, nursing, and fry production developed in early CRSP work across Nepal
- Developing of more sustainable carp polyculture systems suitable to small-scale farmers through the integration of periphyton culture



CAMBODIA & VIETNAM

- Developing grow-out techniques using AquaFish CRSP Formulated Feed to produce market-sized fish
- Optimizing breeding and weaning techniques for wild striped snakehead
- Developing cost-effective alternative feeds for carnivorous freshwater species for small-scale farming of snakeheads

BANGLADESH

- Improving tilapia-carp polyculture for increased yield, profits, and improved water quality
- Developing pulsed feeding strategies to improve growth performance, gastrointestinal nutrient absorption efficiency, and establishment of beneficial gut flora in tilapia pond culture
- Testing semi-intensive polyculture technology on Shing/Koi culture
- Expanding "cage/pond" polyculture for carp, Mola, & prawns



US AND INTERNATIONAL AQUAFISH PARTNERS IN ASIA

Oregon State University-Lead Award Institution
Agriculture and Forestry University
Asian Institute of Technology
Bangladesh Agricultural University, Bangladesh
Can Tho University, Vietnam
Central Luzon State University, Philippines
Directorate of Fisheries Development, Nepal
Fisheries Research Center, Nepal
Hainan University, China
Hajee Mohammad Danesh Science Technology University, Bangladesh
Huazhong Agricultural University, China
Inland Fisheries Research & Development Institute, Cambodia

Khulna University, Bangladesh
Network of Aquaculture Centres in Asia-Pacific, Thailand
Nong Lam University, Vietnam
North Carolina State University
Shanghai Ocean University, China
Southeast Asian Fisheries Development Center, Philippines
The University of Michigan
University of Connecticut-Avery Point
University of Dhaka, Bangladesh
Ujung Batee Aquaculture Center, Indonesia
Wuhan University, China

CAPACITY BUILDING HIGHLIGHTS

CAPACITY BUILDING IN ASIA

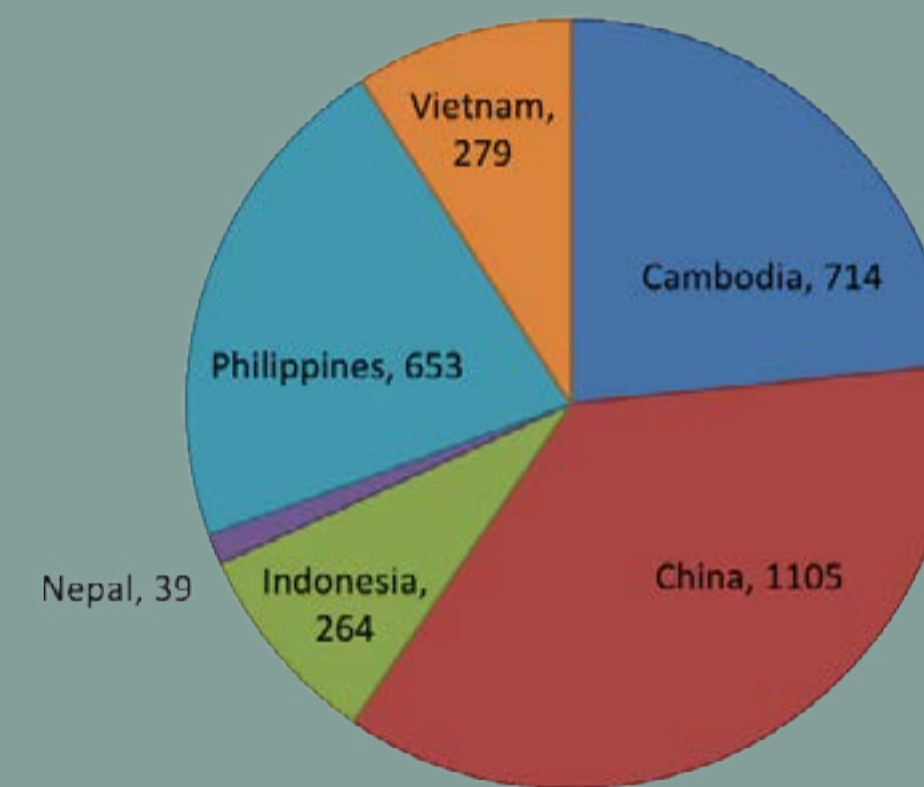
AquaFish has a long history of building aquaculture capacity in Asia through partnering with host country institutions to lead short-term and long-term training. AquaFish has set a 50% benchmark for training women in all education opportunities, and each core project is required to conduct at least one activity engaging women in aquaculture.



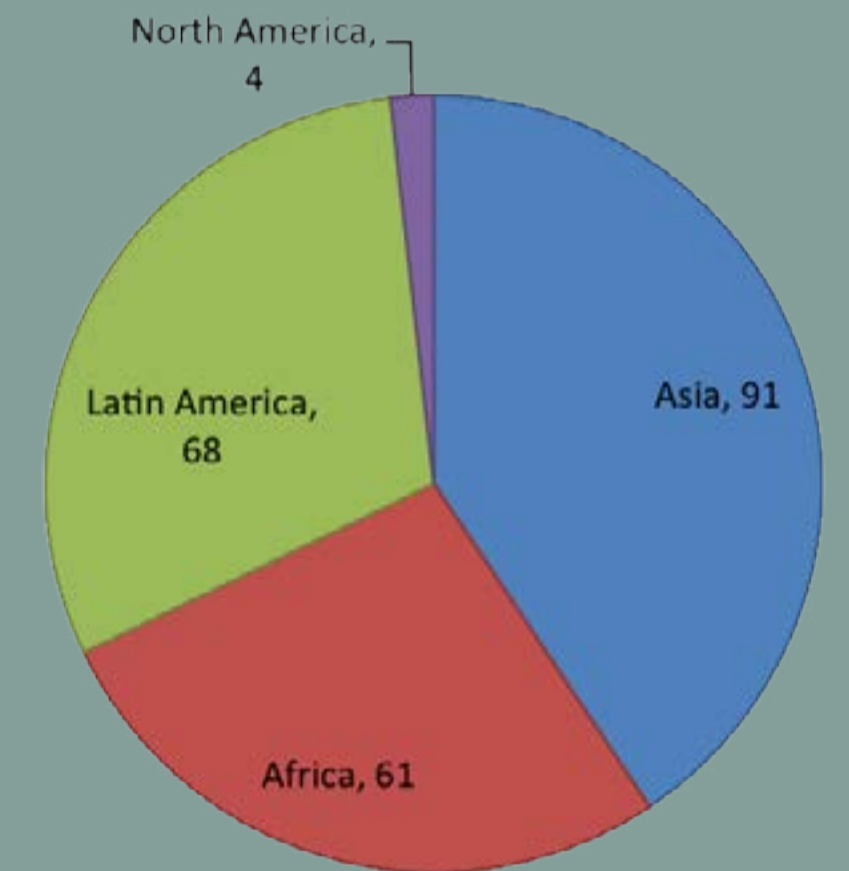
Short-Term Training Events

Over the last eight years, AquaFish projects have advanced skill-building and other opportunities to over 3,000 men and women in Asia, through 91 specialized trainings, short courses and workshops.

Capacity Building in Asia
Number of Short-Term Trainings per Country, 2006-2013



Regional Capacity Building
Number of Short-Term Trainings by Region, 2006-2013

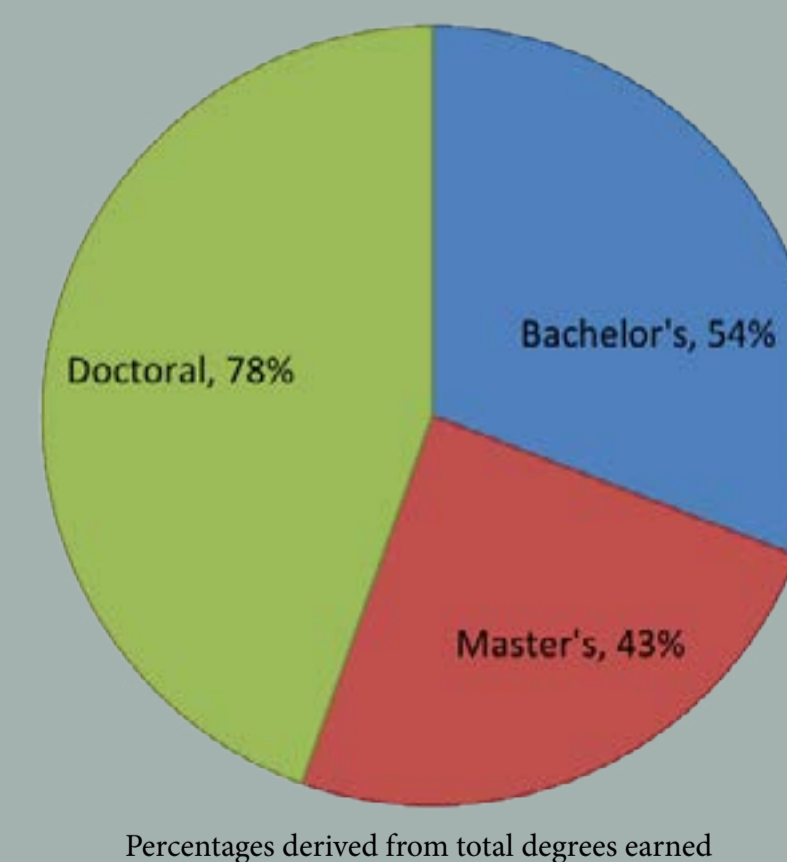


Long-Term Training

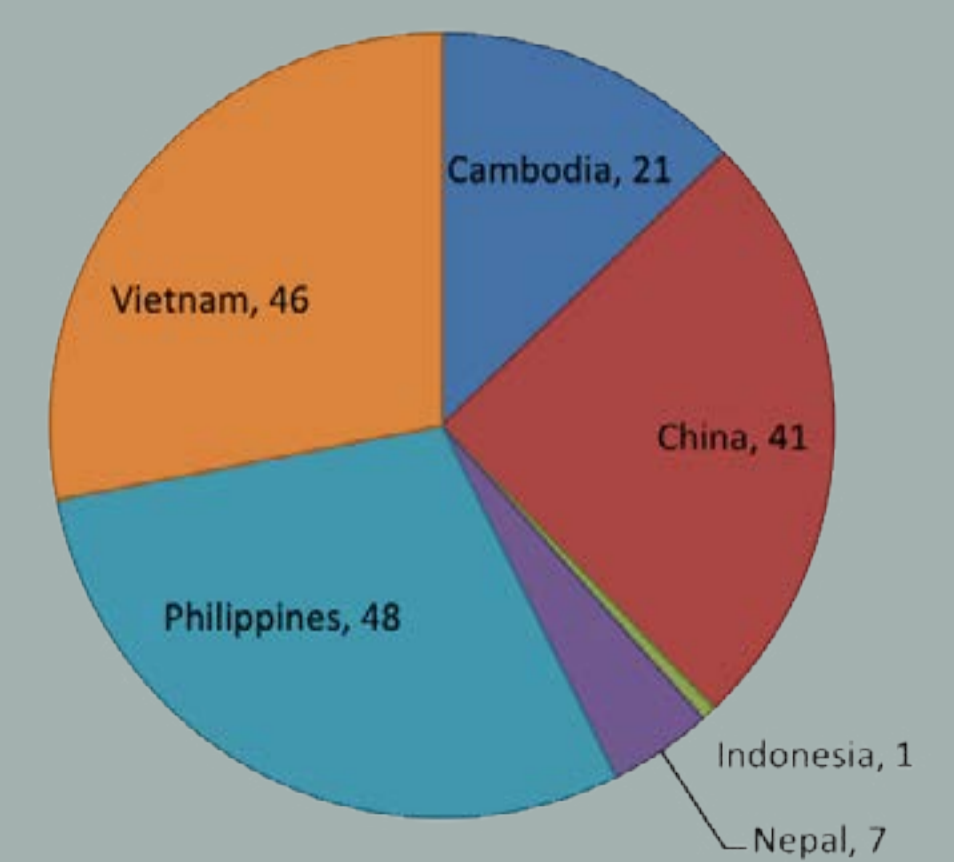
Long-term training opportunities through post-secondary degree programs were supported for 164 students from six countries across the region. Over half (55%) of those earning degrees were women, a capacity building achievement unique to the region. Through these efforts, AquaFish is helping to strengthen in-country educational institutions and programs, and to prepare generations of professional scientists in areas of the world where need is greatest.



Long-Term Training in Asia
Advanced Degrees Earned by Asian Women, 2006-Present



Long-Term Training in Asia
Number of Advanced Degrees Earned by Country, 2006-Present



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